Building Site Development

General

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewerlines, telephone and power transmission lines, basements, open ditches, and cemeteries. The excavations are most commonly made by trenching machines or backhoes. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

Dwellings With or Without Basements

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

Small Commercial Buildings

Limitation ratings are given for undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, tees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those that affect plant growth and trafficability after vegetation is established.

See the National Soil Survey Handbook, Part 620, for criteria used in rating specific uses.

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
AAB ADAMS	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Severe: droughty
AaC ADAMS	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
AaD ADAMS	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope
AbD ADAMS	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
AdA AGAWAM	Severe: cutbanks cave	Slight:	Slight:	Slight:	Slight:	Slight:
AdB AGAWAM	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Slight:
AdC AGAWAM	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: slope

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
AdD AGAWAM	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
B.P. BORROW PITS	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
BgB BELGRADE	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action	Severe: frost action	Slight:
BgC BELGRADE	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action, slope	Severe: frost action	Moderate: slope
Bo BIDDEFORD	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, low strength, ponding	Severe: excess humus, ponding
BuB2 BUXTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, low strength, wetness	Severe: wetness
BuC2 BUXTON	Severe: wetness	Moderate: shrink-swell, slope, wetness	Severe: wetness	Severe: slope	Severe: frost action, low strength	Moderate: slope, wetness

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
CfB CHARLTON	Slight:	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
CfC2 CHARLTON	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope, small stones
CfD2 CHARLTON	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
ChB CHARLTON	Slight:	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
ChC CHARLTON	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, small stones
ChD CHARLTON	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Ck COASTAL BEACH	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: droughty, excess salt, wetness

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
Du DUNE LAND	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope
EMB ELMWOOD	Severe: wetness	Moderate: shrink-swell, wetness	Severe: wetness	Moderate: shrink-swell, slope, wetness	Severe: frost action, low strength	Moderate: wetness
EmC2 ELMWOOD	Severe: wetness	Moderate: shrink-swell, slope, wetness	Severe: wetness	Severe: slope	Severe: frost action, low strength	Moderate: slope, wetness
G.P. SAND AND GRAVEL PITS	Severe: cutbanks cave	Slight:	Slight:	Slight:	Slight:	Severe: droughty, small stones
Ha HADLEY	Severe: cutbanks cave	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding, frost action	Moderate: flooding
HfB HARTLAND	Slight:	Slight:	Slight:	Moderate: slope	Severe: frost action	Slight:
HfC2	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Severe: frost action	Moderate: slope

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
HfD2 HARTLAND	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action, slope	Severe: slope
HkB HINCKLEY	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	slight:	Severe: droughty, small stones
HkC HINCKLEY	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty, small stones
HkD HINCKLEY	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope, small stones
HrB HOLLIS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
HrC HOLLIS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
HrD HOLLIS	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
HsB HOLLIS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
HsC HOLLIS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
HsD HOLLIS	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope
LC LEICESTER	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
Le LEICESTER	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
lk Limerick	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, frost action, wetness	Severe: wetness
Md Made Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
MeB Melrose	Moderate: too clayey	Moderate: shrink-swell	Moderate: shrink-swell	Moderate: shrink-swell, slope	Severe: low strength	Slight:
MeC Melrose	Moderate: slope, too clayey	Moderate: shrink-swell, slope	Moderate: shrink-swell, slope	Severe: slope	Severe: low strength	Moderate: slope
Mf MADE LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
MkB MERRIMAC	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Moderate: droughty
MkC2 MERRIMAC	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: droughty, slope
MkD2 MERRIMAC	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
NgB NINIGRET	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action, wetness	Moderate: droughty, wetness

Androscoggin and Sagadahoc county

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
On ONDAWA	Severe: cutbanks cave	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding	Moderate: flooding
Pa PEAT	Severe: excess humus, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: frost action, ponding	Severe: excess humus, ponding
MUCK	Severe: excess humus, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: frost action, ponding	Severe: excess humus, ponding
PbB PAXTON	Moderate: dense layer	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Slight:
PbC PAXTON	Moderate: dense layer, slope	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action	Moderate: slope
PbD PAXTON	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
PfB PAXTON	Moderate: dense layer, wetness	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Moderate: large stones

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
PfC PAXTON	Moderate: dense layer, slope, wetness	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope
PfD PAXTON	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Py PODUNK	Severe: cutbanks cave, wetness	Severe: flooding	Severe: flooding, wetness	Severe: flooding	Severe: flooding, frost action	Moderate: flooding, wetness
QU. QUARRIES	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
RhC ROCK LAND	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
HOLLIS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
RhD ROCK LAND	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock

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RhD HOLLIS	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope
S.L. STRIPPED LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Sa SACO	Severe: cutbanks cave, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, frost action, ponding	Severe: flooding, ponding
SCA SCANTIC	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, low strength, wetness	Severe: wetness
So SCARBORO	Severe: cutbanks cave, ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: droughty, excess humus, ponding
SuC2 SUFFIELD	Severe: wetness	Moderate: shrink-swell, slope, wetness	Severe: wetness	Severe: slope	Severe: frost action, low strength	Moderate: slope, wetness
SuD2 SUFFIELD	Severe: slope, wetness	Severe: slope	Severe: slope, wetness	Severe: slope	Severe: frost action, low strength, slope	Severe: slope

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SxB SUTTON	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: wetness
SXC SUTTON	Severe: wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope, wetness
syb sutton	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: large stones, wetness
syc SUTTON	Severe: wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones, slope, wetness
SZA SWANTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, low strength, wetness	Severe: wetness
Tn TIDAL MARSH	Severe: excess humus, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: excess salt, excess sulfur, ponding
Wa WALPOLE	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness

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Wg WHATELY	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, low strength, ponding	Severe: ponding
Wh WHITMAN	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding
Wn WINOOSKI	Severe: cutbanks cave, wetness	Severe: flooding	Severe: flooding, wetness	Severe: flooding	Severe: flooding, frost action	Moderate: flooding, wetness
WrB WOODBRIDGE	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: wetness
WSB WOODBRIDGE	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: large stones, wetness